Bosei Maru Bridge Data Quality Control Report

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Addendum

Members of the WOCE Hydrographic Project Office (WHPO) and WOCEMET met at the 13th Data Products Committee (DPC) meeting in College Station, TX to discuss reconciliation of the WOCE cruise line designators. This was done in anticipation of the future release of version 3 of the WOCE global data set, and resulted in changes to several WOCE cruise line designations.

On May 11, 2001 WOCEMET removed the WOCE designation for the cruise P__02_/06. The quality control information for this data has been left in this report for the user, but please note that the line previously known as P__02/06 is NOT a WOCE cruise line.

The dates for the cruise P__02/06 have been updated from 01/20/94 – 02/02/94 to 10/15/94-10/22/94. Please note that the dates for the cruise P__02/06 are now 10/15/94-10/22/94.

Introduction:

This report summarizes the quality of surface meteorological data collected by the *Bosei Maru* (identifier: JGAW) bridge crew during one WOCE cruise. The data were provided to the Florida State University Data Assembly Center (DAC) in electronic format by M. Fukasawa at Tokai University, Japan and were converted to standard DAC netCDF format. The data were then processed using an automated screening program, which adds quality control flags to the data, highlighting potential problems. Finally, the Data Quality Evaluator (DQE) reviews the data and current flags. Flags are then added, modified, and deleted according to the judgement of the Data Quality Evaluator and other DAC personnel. An in depth description of the WOCE quality control procedures can be found in Smith et al. (1996). The data quality control report summarizes all flags for the *Bosei Maru* bridge observations and explains reasons why these flags were assigned.

Statistical Information:

The *Bosei Maru* WOCE cruise data are expected to include observations taken every hour. Values for the following variables were collected:

Time	(TIME)
Latitude	(LAT)
Longitude	(LON)
Earth Relative Wind Direction	(DIR)
Earth Relative Wind Speed	(SPD)
Sea Temperature	(TS)
Sea Temperature by Thermo-salinometer	(TS2)
Atmospheric Pressure	(P)
Air Temperature at 5 m	(T)
Air Temperature at 12 m	(T2)
Relative Humidity at 5 m	(RH)
Relative Humidity at 12 m	(RH2)

Details for the cruise are listed in Table 1 and include cruise dates, number of records, number of values, number of flags, and total percentage of data flagged. A total of 2,028 values are evaluated with 36 flags added by the preprocessor and the DQE resulting in a total of 1.78% of the values being flagged.

Table 1: Statistical Cruise Information

CTC	Dates	Number of Records	Number of Values	Number of Flags	Number Flagged
P__02_/06	01/20/94 – 02/02/94	169	2,028	36	1.78

Summary:

The bridge data for the *Bosei Maru*, except for the platform positioning data, are of excellent quality. The distribution of flags for each variable is detailed in Table 2.

Table 2: Number of Flags and Percentage Flagged for Each Variable

Variable	F	Total Number of Flags	Percentage of Variable Flagged
TIME		0	0.00
LAT	18	18	10.65
LON	18	18	10.65
DIR		0	0.00
SPD		0	0.00
TS		0	0.00
TS2		0	0.00
P		0	0.00
T		0	0.00
T2		0	0.00
RH		0	0.00
RH2		0	0.00
Total Number of Flags	36	36	
Percentage of All Values Flagged	1.78	1.78	

The only problem was the large number of F flags the preprocessor applied to the latitude and longitude, representing unrealistic movement by the vessel determined from the platform positioning data. Otherwise, the DQE did not have to add any additional flags.

References:

Smith, S.R., C. Harvey, and D.M. Legler, 1996: *Handbook of Quality Control Procedures and Methods for Surface Meteorology Data*. WOCE Report No. 141/96, Report WOCEMET 96-1, Center for Ocean-Atmospheric Prediction Studies Florida State University, Tallahassee FL 32306-2840